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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,701	11/05/2003	Hubertus Van Aert	27500-GN02132	7078

7590 08/01/2005

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EXAMINER
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SCHWARTZ, PAMELA R

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 08/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/701,701

Applicant(s)

AERT ET AL.

Examiner

Pamela R. Schwartz

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-11 is/are rejected.
- 7) ☒ Claim(s) 2,3 and 12-34 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/5/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1774

1. The election of species is hereby withdrawn.
2. European Document 02102602 submitted with applicants' information disclosure statement (IDS) is not a European Search Report as stated on the IDS. Therefore, it has been crossed off from the form. The document submitted appears to be the priority document.
3. The disclosure is objected to because of the following informalities: The monomer II-4 disclosed on page 13 of the specification does not meet the general formula II as set forth. For purposes of examination, it was assumed that the bonds to the nitrogen were all single bonds as indicated in the general description in the specification and in the claims.

Appropriate correction is required.

4. Claims 2, 3 and 12-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. Claims 23-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. These claims recite a monomer containing a nitrogen atom having four bonds to it, but not marked as having a positive charge or counter ion associated with it. The examiner has considered the specification which fails to clarify this issue. It

appears that there is an error or omission in the claimed formula and the formula as recited in the specification or a lack of description supporting the formula as set forth.

6. Claims 23-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Formula III is unclear because it includes a nitrogen with four bonds to it, with no indication that the monomer carries a charge or is associated with a counter ion. It is unclear what applicants intended to claim.

Consequently, for examination, the examiner assumed that there were no double bonds to the nitrogen atom which is consistent with formulas I and II.

7. Claims 1 and 4-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beckley et al. (US 2003/0059599) taken alone, or in view of Saito et al. (EP 888904). Beckley et al. disclose a polymeric dispersion of particles having ethylenically-unsaturated monomers and nitrogen-containing compounds incorporated therein as copolymerized units (see the abstract and [0019-0020, 0026, 0028, 0031]). These polymer dispersions are incorporated into a coating composition which can contain pigments, crosslinkers, etc. [0048]. The composition is applied to a substrate including paper, plastic sheet, etc [0051]. Use for ink jet printing is suggested [0075]. The polymer is a latex since it is dispersed in water. The polymer will inherently function as a binder based upon the monomer units that may be contained therein. Since the reference discloses addition of pigment and suggests use as an ink jet recording material, inclusion of conventional inorganic pigments would have been obvious to one of ordinary skill in the art. The reference discloses inclusion of cross-linkers, therefore,

inclusion of conventional materials for this purpose, i.e. boric acid, would have been obvious to one of ordinary skill in the art.

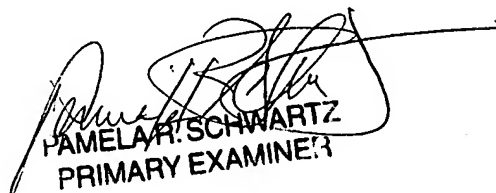
Saito et al. disclose a medium for ink jet recording which includes conventional inorganic particles such as silica, alumina, pseudo-boehmite, etc. and boric acid as hardener (see page 4, lines 16-21 and 53-55). Based upon these disclosures that the pigments and boric acid are known in the art, it would have been obvious to one of ordinary skill in the art to use them in the primary reference as the pigment and hardening agent (cross-linker) disclosed therein.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela Schwartz whose telephone number is (571) 272-1528.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRSchwartz  
July 25, 2005

  
PAMELA R. SCHWARTZ  
PRIMARY EXAMINER